

RCI Features & Characteristics Handbook

MAINTENANCE FEATURES – FEATURE 460 – ATTENUATORS

FEATURE 460 – ATTENUATORS					
Roadway Side	Offsets	LRS Package	Feature Type	Interlocking	Secured
R/L	No	No	Point	Yes	Yes
Responsible Party for Data Collection		District Office of Maintenance			

Definition/Background: Attenuators are intended to provide a motor vehicle with a cushioned impact area prior to solid obstructions such as parapet walls, bridge columns, sign structures, and signal poles. They are generally constructed of modules or cells containing different types of energy absorption materials such as water, sand, or hex foam.

Lists the condition, date of inspection, installation date, repair date, comments, location, model number, attenuator type, and vehicle direction. All required information can be obtained from Type I and Type II inspection reports.

NOTE: Attenuators require twice-yearly inspections, a Type 1 inspection in April and a Type 2 inspection in October. A Type 1 inspection is a visual inspection and a Type 2 inspection is an actual breakdown and cleaning of the attenuator. These inspections are typically performed by field crews and all information pertaining to these inspections may be input by the party performing the inspection or by the MMS personnel responsible for maintaining RCI after notification that the inspections are complete.

NOTE: If the below characteristics are located at a rest area, ramp, or other applicable sub-section, they are to be inventoried against the applicable sub-section number.

ATCOND TN – ATTENUATOR CONDITION

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Use the following code that best describes the condition of the attenuator.

Codes	Descriptions	Codes	Descriptions
01	Good	03	Poor
02	Fair	04	Critical

ATINSPEC – ATTENUATOR INSPECTION DATE

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Code the date of latest attenuator inspection with leading zeros for months less than 10. No hyphens or backslash.

Value for Attenuator Inspection Date: 8 Bytes: MMDDYYYY

RCI Features & Characteristics Handbook

MAINTENANCE FEATURES – FEATURE 460 – ATTENUATORS

ATREPAIR – ATTENUATOR REPAIR DATEX

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Code the date attenuator repaired with leading zeros for months less than 10. No hyphens or backslash.

Value for Attenuator Inspection Date: 8 Bytes: MMDDYYYY

ATRMRS1 – ATTENUATOR REMARKS – 1

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Code the statement concerning attenuator.

Value for Attenuator Remarks - 1: 20 Bytes: XXXXXXXXXXXXXXXXXXXXX

ATRMRS2 – ATTENUATOR REMARKS – 2

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Code the statement concerning attenuator.

NOTE: New to the maintenance add screen.

Value for Attenuator Remarks - 2: 20 Bytes: XXXXXXXXXXXXXXXXXXXXX

ATTLOCCD – ATTENUATOR LOCATION CODE

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Use the following code that describes the location of the attenuator.

Codes	Descriptions	Codes	Descriptions	Codes	Descriptions
GL	Gore left	LS	Left shoulder	RS	Right shoulder
GR	Gore right	MD	Median		

RCI Features & Characteristics Handbook

MAINTENANCE FEATURES – FEATURE 460 – ATTENUATORS

ATTMODEL – ATTENUATOR MODEL NUMBER

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Code the model number given in the Attenuator Inventory and Inspection Procedure, Topic No. 850-055-003.

Value for Attenuator Model Number: 20 Bytes: XXXXXXXXXXXXXXXXXXXX

Model #	01 – Hi-Dro Cell (sandwich)
G	Color G-gray, Y-yellow, GN-green, BLK-black, BL-blue
209	Width of first diaphragm (2'-9")
508	Width of last diaphragm (5'-8")
S	S-standard or N-non-standard
8	Number of bays
S	S-wet or D-dry

Model #	02 – Hi-Dro Cell (cluster)
300	Width (3'-0")
600	Length (6'-0")
W	W-designates Hi-Dro cluster

Model #	03 – G-R-E-A-T System
200	Width of first diaphragm (2'-0")
200	Width of last diaphragm (2'-0")
S	S-standard or N-non-standard
F	
6	Number of bays

Model #	04/05 – Sand Crash Cushion (fitch or energite)
002	No. of 200 lb. Modules
004	No. of 400 lb. Modules
004	No. of 700 lb. Modules
0014	No. of 1400 lb. Modules
0021	No. of 2100 lb. Modules
F&E	Fitch & Energite (mixed installation)

Model #	06 – Hex Foam Sandwich
209	Width of first diaphragm (2'-9")
508	width of last diaphragm (5'-8")
H	
8	Number of bays
S	S-standard or N-non-standard

Model #	08 – QuadGuard System
QS	QS-QuadGuard System
24	Width of diaphragms (24")
5	Number of bays
G	Nose color, G-gray in Florida

Model #	09 – BREAKMASTER 350
106	There is only one model number for this system.
106	
BR	
S5	

10 – CAT 350
There is only one model number for this system.

Model #	11 – REACT 350
75	Design speed: 75, 62, 55, 45 mph
B	B-self-contained backup or S-side mounted anchors
036	Width (36")

Model #	12 – ADIEM 350
xx	Number of modules, 06 or 10

RCI Features & Characteristics Handbook

MAINTENANCE FEATURES – FEATURE 460 – ATTENUATORS

ATTTYPECD – ATTENUATOR TYPE

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Use the code that describes the attenuator type.

Code	Type	Code	Type	Code	Type
01	Hi-Dro Cell (sandwich)	08	QuadGuard System	15	TAU-II
02	Hi-Dro Cell (cluster)	09	BRAKEMASTER 350	16	QuadGuard Elite
03	G-R-E-A-T System	10	CAT 350	17	Smart Cushion
04	Sand Crash Cushion (fitch)	11	REACT 350	18	Easi-Cell
05	Sand Crash Cushion (energite)	12	ADIEM 350	19	X-MAS
06	Hex Foam Sandwich	13	DRAG-NET	20	QuadGuard II
07	Other	14	TRACC		

Examples:



02 – Hi-Dro Cell (cluster)



03 – G-R-E-A-T System



05 – Sand Crash Cushion (energite)



06 – Hex Foam Sandwich



08 – QuadGuard System



12 – ADIEM 350



13 – DRAG-NET



14 – TRACC



15 – TAU-II



16 – QuadGuard Elite

RCI Features & Characteristics Handbook

MAINTENANCE FEATURES – FEATURE 460 – ATTENUATORS

Examples cont.



17 – Smart Cushion



18 – Easi-Cell



19 – X-MAS



20 – QuadGuard II

ATTYPINS – ATTENUATOR INSPECTION TYPE

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Use the following code that describes the attenuator inspection type.

Codes	Descriptions	Codes	Descriptions
01	Type 1 inspection	02	Type 2 inspection

VEHDIRCD – GENERAL VEHICULAR DIRECTION

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
N/A		Maintenance	All Active On and Active Exclusive roads, including managed lanes	N/A	N/A

How to Gather this Data: Use the code that describes the vehicle direction.

Codes	Descriptions	Codes	Descriptions
NB	Northbound	EB	Eastbound
SB	Southbound	WB	Westbound